

REMARKS

Claims 1 to 36 are pending. Claims 19 to 29 have been withdrawn by the Office as directed to non-elected subject matter. Claim 1 has been amended to recite the subject matter with even greater particularity. Support for the amendments can be found throughout the specification, e.g., at page 7, col. 2, paras. [0070] and [0071] and page 3, col. 1, para. [0040] of the published application. The amendments add no new matter to the application.

Withdrawn Rejections

Applicant acknowledges and thanks the Office for withdrawing all previous rejections in response to applicant's arguments.

35 USC § 101

Claims 1 to 18 and 30 to 36 were rejected as allegedly directed to non-statutory subject matter. Applicant does not agree that the present rejection is proper and maintains that the originally-filed claims are directed to statutory subject matter. However, applicant has in the interest of moving the present application toward allowance amended claim 1 to recite the step of outputting analysis results to a computing device. Such an amendment is supported throughout the specification, e.g., at page 3, col. 1, para. [0040]. Accordingly, applicant submits that the claims are directed to patentable subject matter and requests that the present rejection be reconsidered and withdrawn.

35 USC § 103

Claims 1-18 and 30-36 were rejected under 35 U.S.C. 103(a) as allegedly unpatentable over Parsons et al. (U.S. Patent No. 6, 757,412) in view of Curry (U.S. Publication No. 2003/0219151) and in view of Levenson et al. (U.S. Patent No. 6,750, 964). Applicant respectfully traverses for the reasons discussed below.

Parsons describes, *inter alia*, a system and method of helping determine a condition of selected tissue of a patient based on a set of thermal images of the selected tissue acquired over a

time period (see Parsons at Abstract). As applicant discussed in the previous Reply, Parsons fails to teach, or even suggest, at least two elements recited in pending claim 1.

First, applicant reiterates the previous position that Parsons does not teach or suggest the step of “selecting at least one non-ROI at a pixel level of processing” as recited in claim 1 and described in applicant’s specification. Applicant’s arguments set forth in the previous Reply are incorporated herein by reference. Parsons does not appear to disclose, or even fairly suggest, such a selection step.

Second, applicant reiterates his position that Parsons does not appear to teach or suggest ranking the extracted features from the ROI and non-ROI based on feature performance for successful detection of a selected ROI at a pixel level of processing, as disclosed in the present specification and recited in claim 1. Nevertheless, in the interest of moving the present claims toward allowance, applicant has amended claim 1 to recite ranking, in a combinatorial manner, the extracted features from the ROI and non-ROI based on feature performance for successful detection of a selected ROI at a pixel level of processing. Parsons does not disclose or provide any suggestion of such a ranking step as described in the present specification, e.g., at page 7, para. [0070] and [0071].

Curry, which is cited by the Office as a secondary reference, does not remedy the deficiencies of Parsons, the primary reference. Curry describes, *inter alia*, a method for estimating the background signal over an arbitrarily-sized region of a scanned image of a molecular array (see Curry at Abstract). Curry’s method was apparently generated to satisfy a need in the art for “a method for accurately determining an estimated background signal for densely packed features and for estimating background signal in a continuous fashion with respect to position on the surface of a molecular array” (Curry at page 4, col. 2, para. [0020]). Curry, like Parsons, does not appear to teach or suggest, *inter alia*, at least the step of ranking, in a combinatorial manner, the extracted features from the ROI and non-ROI, as described in the present specification. Thus, even if Curry were somehow combined with the disclosure of Parsons, the presently claimed methods would not have been obtained because at least this step would be missing from the combination.

Further, a skilled practitioner would not have had found any reason in Parsons, Curry, Levenson (discussed in further detail below), or any where else in the art, to combine the disclosures of Parsons and Curry. The methods of Curry apparently relate to, *inter alia*, analyzing data obtained by scanning molecular arrays and to a method for determining a background-signal intensity for a specified feature(s) of a molecular array, which involves computing a background-signal intensity over an arbitrarily sized background region surrounding the feature(s) (see Curry at page 1, col. 1, para. [0001]). Parsons, on the other hand, describes a system and method of helping determine a condition of selected tissue of a patient based on a set of thermal images of the selected tissue acquired over a time period (see Parsons at Abstract). Parsons does not appear to disclose or suggest that background interference is problematic for Parsons' method, nor does Curry appear to disclose or suggest that its methods for molecular arrays would be useful in a tissue-imaging method such as that disclosed in Parsons. Applicant submits further that no skilled practitioner would have viewed Curry's steps for estimating the background signal over a region of molecular array, e.g., the generation of a bit mask, as being necessary or useful with Parsons' method. Thus, no skilled practitioner would have found any reason to combine these two references in an attempt to arrive at the present invention.

Levenson, also cited by the Office as a secondary reference, does not remedy the deficiencies of Parsons or Curry. Levenson describes, *inter alia*, a method for identifying target features from one or more images of an unknown sample. The method entails obtaining reference image cubes using a spectral illuminator, processing reference data and defining spectral weighting functions, illuminating the sample with the spectral weighting function and recording images, and processing images and identifying regions of interest (see, e.g., Levenson at col. 3, lines 37 to 67). Levenson, like Parsons and Curry, does not appear to teach or suggest at least the step of "ranking, in a combinatorial manner, the extracted features from the ROI and non-ROI based on feature performance for successful detection of a selected ROI at a pixel level of processing," as is described in the present specification. Thus, even if Levenson were somehow combined with the disclosures of Parsons and Curry, the presently claimed methods would not have been obtained because at least this step would be missing from the combination.

Thus, the Office has not established a *prima facie* case of obviousness against amended claim 1 because, *inter alia*, these publications do not teach or suggest all steps recited in these claims and no skilled practitioner would have found any reason to combine these three references. Claims 2 to 18 and 30 to 36 each depend from claim 1 and are therefore not obvious over the combination of Parsons, Curry and Levenson for at least the reasons discussed above. Parsons, Curry and Levenson, regardless of whether they are considered individually or in combination, fail to render the present claims obvious. Accordingly, applicant requests that the present rejection be reconsidered and withdrawn.

CONCLUSION

Applicant requests that all rejections be reconsidered and withdrawn. Enclosed is a Petition for a Three-Month Extension of Time. The fee for the extension of time is being paid concurrently herewith on the Electronic Filing System (EFS) by way of Deposit Account authorization. Please apply any other charges or credits to deposit account 06-1050, referencing Attorney Docket No. 14255-035001.

Respectfully submitted,

Date: _____

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